AMENDMENTS TO THE CLAIMS

1   1. (Previously Presented) A serial communications system comprising:

2   a scrambler for converting original received data into scrambled data; and

3   an ECC encoder for converting said scrambled data into ECC-encoded data.

4

1   2. (Original) The system as recited in Claim 1, further comprising:

2   a serializer for converting said ECC-encoded data into serialized data;

3   wherein the ECC-encoded data includes frame alignment information; and

4   the system further comprises a receiver for receiving said serialized data and

5   converting the serialized data into data frames based upon the frame alignment information.

1   3. (Original) The system as recited in Claim 2, wherein the receiver comprises:

2   a frame-recoverer for converting said serialized data into data frames;

3   an ECC decoder for converting said data frames into ECC-decoded data and

4   error indications; and

5   a scrambler for converting said ECC-decoded data into de-scrambled data.

1   4. (Currently Amended) The system as recited in Claim [[5]] 3, wherein said frame-

2   recoverer uses said error indications in converting said serialized data into data frames.

1   5. (Original) The system as recited in Claim 1, wherein said ECC encoder applies an

2   error correction code in converting said scrambled data into said ECC-encoded data.

1   6. (Previously Presented) A serial communications method, comprising the steps of:

2   converting original received data into scrambled data; and

3   converting said scrambled data into ECC-encoded data.

2

1   7. (Original) The method as recited in Claim 6, further comprising the steps of:

2   generating a serial stream of the ECC-encoded data; and

3   transmitting said serial stream.

1   8. (Original) The method of Claim 7, wherein:

2   the ECC-encoded data includes frame alignment information; and

3   the method further comprises receiving said serialized data and converting

4 said serialized data into data frames based upon said frame alignment information.

1   9. (Original) The method of Claim 7, further comprising:

2   receiving said serialized data;

3   converting said serialized data into data frames;

4   converting said data frames into ECC-decoded data and error indications; and

5   converting said ECC-decoded data into de-scrambled data.

1   10. (Original) The method of Claim 9, wherein the step of converting the serialized

2 data comprises converting the serialized data into data frames based upon said error

3 indications.

1   11. – 33. (canceled)

1   34.   (Currently Amended) A serial communication system comprising:

2   a scrambler for converting received data into scrambled data, said received

3 data being without redundant bits inserted by said serial communication system or being re-

4 encoded by said serial communiction system; and

5   an ECC encoder for converting said scrambled data into ECC-encoded data.